



National Aeronautics and  
Space Administration

John H. Glenn Research Center  
at Lewis Field

## **Lewis' Educational and Research Collaborative Internship Program (LERCIP)**

### **2005 SUMMER INTERNSHIP FOR NASA SCHOLARS**

**“To inspire the next generation of explorers... as only NASA can”**

#### **Program Description**

This is an educational program that provides a summer opportunity for students of Science, Technology, Engineering, and Mathematics (STEM). Internships of a 10-week duration are available during the summer months at the NASA John H. Glenn Research Center (GRC). The internships are offered under the auspices of Lewis' Educational and Research Collaborative Internship Program (LERCIP) and is a collaborative undertaking of GRC's Educational Programs Office (EPO) and the Ohio Aerospace Institute (OAI). The LERCIP Scholars' component offers opportunities for college sophomores through Ph.D candidates.

The LERCIP program also has the following other internship opportunities: college, teacher and high school students. Interested applicants can obtain LERCIP application information and respective deadline dates by accessing the following websites: (<http://www.grc.nasa.gov/WWW/OEP>) or (<http://www.oai.org>).

#### **Program Goal**

LERCIP provides students with introductory professional experiences to complement their academic programs and research interest under the guidance of a GRC scientist or engineer who serves as the student's mentor. The program is designed to provide experiences in a research and development environment in order to expand the student's understanding of possible career choices that are available at NASA. Program activities include oral presentations, and a variety of enrichment activities. Because of the program's short duration and intensive requirements, no vacation time or summer day classes can be taken during the internship. If selected, the student must be present for the entire 5-day, 40-hours per week (8:00 am to 4:30 pm, Monday through Friday) assignment.

#### **Glenn Research Center**

NASA's vision is: To improve life here, to extend life to there, to find life beyond. NASA's mission is: To understand and protect our home planet, to explore the Universe and search for life... As one of NASA's 10 field centers, GRC makes many unique contributions. GRC leads NASA research and development in the area of Aeropropulsion, Turbomachinery and Microgravity Science. The Center plays a significant role in the Agency's role to promote economic growth and national security through safe, superior, and environmentally compatible U.S. civil and military aircraft propulsion systems. You are encouraged to visit the GRC home page to learn more about our research activities and programs at <http://www.grc.nasa.gov>.

GRC is located in the Great Lakes region of Ohio and occupies a 350-acre site, adjacent to Cleveland Hopkins International Airport. The Center comprises over 150 buildings which contains a unique collection of world-class facilities.

#### **Ohio Aerospace Institute**

OAI is a private, nonprofit organization whose purpose is to advance aerospace-related capabilities through industry university/government collaboration. Such partnerships have led to critical solutions for aerospace applications, developed new technologies in medical science, created improved design/manufacturing and measurement systems, and provided educational enrichment and support to faculty and students. OAI is located next to the GRC west gate. For more information on OAI visit <http://www.oai.org>.

#### **Eligibility Requirements**

Applicants must be **U.S. CITIZENS** who are full-time students in the Fall 2005 and pursuing a baccalaureate or higher degree in a field of STEM at an accredited NASA Scholars' program or university throughout the United States or Puerto Rico. Students must have a cumulative GPA of 3.0 on a 4.0 scale. **Application deadline date: January 15, 2005**.

## Application Information

Students seeking internships must submit an application through your Scholar Program Administrator. You will be sent a postcard or an email (if provided) acknowledging receipt of your application. All students are required to complete the entire 10-week tenure. The program does not provide for vacation time and such time should be scheduled outside the tenure period. Students are expected to adhere to the tenure period and dates specified on their application.

Additional information may be obtained by contacting:

NASA GRC

Email: [intern@grc.nasa.gov](mailto:intern@grc.nasa.gov)

Phone: 216-433-6656

Application materials must be received no later than **JANUARY 15, 2005**, to assure consideration. Application materials received after the deadline will not be considered or processed. **FAXED copies are unacceptable.**

## LERCIP Selection Criteria

Selection in this program is very competitive and is based on the following:

- GRC organizational, programmatic and budgetary commitments
- Academic level and relative coursework
- Performance background and research interests
- Student/Mentor availability

**STUDENTS IDENTIFIED FOR INTERNSHIP POSITIONS should be notified of internship appointment via offer letter by APRIL 15, 2005.**

## Stipend Information

Students receive a biweekly stipend for their appointments. The stipend amount depends on the academic standing achieved by the student at the time tenure begins and must be supported by student's transcripts. If selected, stipend details and program information will be provided in the offer letter. The normal statutory tax withholdings will be held--the tax portion withheld will depend on the tax status submitted by participant. This program does not provide unemployment compensation to participants.

Academic standing:      Freshmen/Sophomore \$800      Junior/Senior \$1000      Master/Doctoral Student \$1200

## Travel Reimbursement

One round-trip travel reimbursement will be provided to students whose city of permanent residence are more than 50 miles from Cleveland **and relocate** for the program. Reimbursement is based on student's permanent residence and shortest-route. Mileage @ 37.5 cents per mile will be paid to eligible students approximately one week **after** tenure begins.

## Internship Dates for 2005

*Session I:      May 23 to July 29, 2005*

*Session II:      June 6 to August 12, 2005*

*Session III:      June 13 to August 19, 2005*

## Housing Accommodations

Students are responsible for making their own housing and travel arrangements. This program does not provide living expenses. If a list of short-term housing is desired, check the appropriate box on the application and one will be provided to you. Please understand that the housing list has been assembled by OAI for your convenience. **Accommodations on the list have not been checked and OAI does not advocate them over other accommodations you may find on your own.** If selected for the program, you are encouraged to start your search for housing as soon as possible. See Housing Section on page two of application.

## 2005 LERCIP SCHOLARS' APPLICATION

Please type or print in black ink only.

Legal name: \_\_\_\_\_ Date of birth: \_\_\_\_\_  
*First MI Last Month Date Year (i.e. 10/15/2004)*

Place of birth: \_\_\_\_\_ Gender: ☐ Male ☐ Female  
*City State Country*

**U.S. citizen** ☐ Yes ☐ No Note: if U.S. citizen and born outside the U.S. or Puerto Rico you must provide the information requested below and if selected provide documentation prior to start date.

Naturalization Number: \_\_\_\_\_ Date Issued: \_\_\_\_\_ Date Expired: \_\_\_\_\_

Passport Number: \_\_\_\_\_ Date Issued: \_\_\_\_\_ Date Expired: \_\_\_\_\_

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### YOU MUST PROVIDE BOTH ADDRESSES:

PERMANENT (HOME) ADDRESS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
*City State Zip code*

Telephone: (\_\_\_\_) \_\_\_\_\_

Alternate telephone: (\_\_\_\_) \_\_\_\_\_

Permanent E-mail address: \_\_\_\_\_

SCHOOL NAME: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
*City State Zip code*

Telephone: (\_\_\_\_) \_\_\_\_\_

Alternate telephone: (\_\_\_\_) \_\_\_\_\_

**Please check box below where you want any LERCIP program correspondence sent:**

- Prior to April 15th: ☐ Permanent home address ☐ School address
- After April 15th: ☐ Permanent home address ☐ School address

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Current academic level: \_\_\_\_\_ Academic Level as of Fall 2005: \_\_\_\_\_

College major: \_\_\_\_\_

- 
- |   |   |
|---|---|
| <input type="checkbox"/> College Sophomore (14) | <input type="checkbox"/> Master' Student (17) |
| <input type="checkbox"/> College Junior (15)    | <input type="checkbox"/> Ph.D. Student (18)   |
| <input type="checkbox"/> College Senior (16)    |   |

Credit hours earned as of May/June 2005: \_\_\_\_\_ Total credit hours required for graduation: \_\_\_\_\_

Planned graduation date: \_\_\_\_\_  
*(Month/date/year)*

Cumulative GPA out of 4.0 \_\_\_\_\_ must be supported by school transcripts *(Minimum eligibility: 3.0 GPA)*

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### PROGRAM USE ONLY

Date received: \_\_\_\_\_ PR requirement: \$ \_\_\_\_\_

Date processed: \_\_\_\_\_ ☐14 ☐15 ☐16 ☐17 ☐18

Initials: \_\_\_\_\_

## PLACEMENT INFORMATION

Please indicate the discipline in which you would like to intern *if positions are available*. If choosing more than one discipline, indicate order of preference by numbering 1 through 3 with 1 being your first choice. Final student placement is determined by mentors' summer assignment requests. We do not offer internships in **BIOLOGY, MEDICINE, or VETERINARY MEDICINE**.

|                                  |                                  |
|----------------------------------|----------------------------------|
| _____ Aero/Astro Engineering     | _____ Materials Engineering      |
| _____ Biomedical                 | _____ Math                       |
| _____ Ceramics                   | _____ Mechanical Engineering     |
| _____ Chemical Engineering       | _____ Optics                     |
| _____ Chemistry                  | _____ Physics                    |
| _____ Computer Eng./Science      | _____ Polymers                   |
| _____ Electrical Engineering     | _____ Structural Engineering     |
| _____ Environmental Eng./Science | _____ Systems Engineering        |
|                                  | _____ Other (be specific): _____ |

### 2005 Summer Internship Start Dates (indicate preference by checking appropriate box below):

☐ Session I: May 23 to July 29, 2005    ☐ Session II: June 6 to August 12, 2005    ☐ Session III: June 13 to August 19, 2005

### Have you previously participated in a NASA program? ☐ Yes ☐ No (If no, skip to next question)

If yes, which NASA programs you have applied for (A) or participated in (P) previously, and indicate the year:

| (A) (P)  | (Year) | (A) (P)  | (Year) |
|--|--------|--|--------|
| <input type="checkbox"/> <input type="checkbox"/> GRC Engineering Technology | _____  | <input type="checkbox"/> <input type="checkbox"/> GRC LERCIP Scholar | _____  |
| <input type="checkbox"/> <input type="checkbox"/> GRC Exploring              | _____  | <input type="checkbox"/> <input type="checkbox"/> FIRST              | _____  |
| <input type="checkbox"/> <input type="checkbox"/> GRC NASA Plus              | _____  | <input type="checkbox"/> <input type="checkbox"/> NSIP               | _____  |
| <input type="checkbox"/> <input type="checkbox"/> GRC N.A.S.A. Project       | _____  | <input type="checkbox"/> <input type="checkbox"/> NASA SHARP         | _____  |
| <input type="checkbox"/> <input type="checkbox"/> GRC Shadowing              | _____  |  |        |
| <input type="checkbox"/> <input type="checkbox"/> GRC TSU College Bound      | _____  | <input type="checkbox"/> <input type="checkbox"/> OTHER: _____       | _____  |

### Indicate below any program you attended or participated in (be sure to include date):

☐ **NASA Corporate Recruitment Event** (Information Session/Career Fair)  
University where event was held: \_\_\_\_\_ Date: \_\_\_\_\_

☐ **Other Career/Job Fair with NASA Booth – Event Name:** \_\_\_\_\_ Date: \_\_\_\_\_

☐ **NASA Explorers School – Name:** \_\_\_\_\_ Date: \_\_\_\_\_

☐ **SEMAA – Site name:** \_\_\_\_\_ Date: \_\_\_\_\_

☐ **NASA Science and Technology Scholarship Program (STSP)**  
Center: \_\_\_\_\_ Date: \_\_\_\_\_

☐ **YES**, I would like to be notified of any other internship opportunities that may become available.

### How did you learn about the program?

|   |   |
|---|---|
| <input type="checkbox"/> Faculty member or school official          | <input type="checkbox"/> Relative who works for <input type="checkbox"/> NASA <input type="checkbox"/> NASA contractor: |
| <input type="checkbox"/> Group visit to Glenn Research Center       |   |
| <input type="checkbox"/> Inquiry to NASA about summer opportunities | _____   |
| <input type="checkbox"/> NASA Website                               | Name/Relationship   |
| <input type="checkbox"/> GRC Educational Programs staff             |   |
| <input type="checkbox"/> GRC Educational Programs Website           | _____   |
| <input type="checkbox"/> Friend who participated in LERCIP          | Company Name or NASA  |
| <input type="checkbox"/> I was a prior LERCIP participant           |   |
| <input type="checkbox"/> Other (please specify): _____              |   |

### Housing Information

If selected, do you need to be provided with the program's short-term housing list? ☐ **YES** ☐ **NO**

Do we have your permission to include your name and email address in a listing to be sent to selected students interested in shared housing? ☐ **YES** ☐ **NO** (If selected, you are encouraged to start your search for housing immediately.)

## ACADEMIC INFORMATION

**Current college/university:** \_\_\_\_\_

Degree currently pursuing: ☐ B.A. ☐ B.S. ☐ M.S. ☐ Joint B.S./M.S. ☐ Ph.D.

Academic major: \_\_\_\_\_ Academic minor: \_\_\_\_\_

Will you be attending a different college/university in fall 2005? ☐ Yes ☐ No

If yes, check reason: ☐ Transfer student ☐ Graduating senior ☐ First year graduate student ☐ Ph.D. student

If yes, to which college/university? \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Telephone Number: (\_\_\_\_) \_\_\_\_\_

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### All applicants must list your anticipated Winter/Spring 2005 courses:

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

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### Specialized skills areas: (please indicate your experience/skill level and indicate the specific software/programs used):

☐ Desktop publishing, i.e. Pagemaker ☐ Database, i.e. SQL, MS Access ☐ Internet browser, i.e. Netscape

\_\_\_\_\_

☐ Web Page design, i.e. HTML ☐ Computer graphics, i.e. Adobe ☐ Programming, i.e. C++, Java

\_\_\_\_\_

☐ Other: \_\_\_\_\_

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### Academic honors/awards (please include year of award)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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### Work experience:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## STUDENT'S NARRATIVE STATEMENT

(Type or print in black ink only)

Student name: \_\_\_\_\_ Date: \_\_\_\_\_

In the space below, tell us what you would like to achieve during your internship at GRC.

*Areas to address: reason(s) for wanting to participate in LERCIP, potential placement areas, how this internship would help you pursue your career interests/aspirations, how **both** you and NASA will benefit if you are selected to participate.*

## LERCIP SCHOLAR PLACEMENT FORM

Name: \_\_\_\_\_

Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Month Date Year (09/03/2005)

School \_\_\_\_\_ Current academic level: \_\_\_\_\_

Academic major(s) \_\_\_\_\_ Graduation date \_\_\_\_\_

Please check the appropriate box to identify the name of your NASA Scholarship/Fellowship Program.

### Glenn Research Center sponsored

- ☐ Cleveland State University
- ☐ Tennessee State University
- ☐ University of Michigan
- ☐ Florida A&M University
- ☐ NASA College Scholarship Fund

### NASA Headquarters sponsored

- ☐ Society of Mexican American Engineers and Scientist (MAES)
- ☐ Society of Professional Hispanic Engineers (SHPE)
- ☐ Undergraduate Researchers Scholar Program (URSP)
- ☐ Women in Science and Engineering (WISE)—Spelman College
- ☐ McNair Scholar Program—Project Space—Morehouse College
- ☐ Other \_\_\_\_\_

Your School or Program Point of Contact: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ Email address: \_\_\_\_\_

Number of years you have been in the program: \_\_\_\_\_

Is your summer internship stipend paid to you through your scholarship? ☐ Yes ☐ No

If yes, does it also provide for travel reimbursement? ☐ Yes ☐ No

### Past participants only

If you were a 2004 LERCIP participant, would you like to return to the same organization and mentor? ☐ Yes ☐ No

\_\_\_\_ I have contacted my mentor from last year and he/she is interested in hosting me again.

\_\_\_\_ I have not contacted my mentor from last year.

If yes, you are encouraged to contact the mentor and let him/her know that you have applied for 2005, and if summer positions are available in his/her respective organization, you would like to be considered. Remember there is **NO** guarantee of a position, as organizational budgetary needs change each year.

Have you participated in LERCIP prior to 2004? ☐ Yes \_\_\_\_\_ ☐ No

(year)

Have you interned at another NASA field installation? ☐ Yes ☐ No \_\_\_\_\_  
Center and/or site name Year

**All applicants:** review page 2 of your application and the NASA home page <http://www.grc.nasa.gov> to find out about GRC research/programs/projects. In the space below provide us with specific areas/programs that you are interested in to assist us in possible placement areas at NASA GRC:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**STUDENT CERTIFICATION**  
(Completion of form is required for processing of application)

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I certify, by my signature below, that I am a citizen of the United States of America and that all information contained in this application is accurate and correct. I further understand and agree that any misrepresentation or inaccurate information on this completed application will be cause for disqualification for consideration and from participation in the LERCIP program and other NASA Programs. I also understand that if selected to participate, I must participate for the full duration of the program and failure to do so or abide by the program policies will result in the immediate termination of my internship. I understand that participation in the program does not entitle me to unemployment compensation.

Printed legal name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**REFERENCES:**

You must provide two references other than the faculty/teacher providing your recommendation for the program.

1. \_\_\_\_\_ (\_\_\_\_\_) \_\_\_\_\_  
Name, title Telephone number
  2. \_\_\_\_\_ (\_\_\_\_\_) \_\_\_\_\_  
Name, title Telephone number
-





## STUDENT INFORMATION

Name: \_\_\_\_\_

Gender: ☐ Male ☐ Female

Program you are applying for: **LERCIP Scholars'**

In order to determine the degree to which members of each ethnic/racial group are reached by this announcement, NASA requests that the student check the appropriate block(s) below. Submission of this information is VOLUNTARY. Please complete and return with application materials.

### Ethnicity background

1. ☐ Hispanic/Latino(a)
2. ☐ White (Non-Hispanic)
3. ☐ Black or African-American (Non-Hispanic)
4. ☐ Native Hawaiian or Pacific Islander (Non-Hispanic)
5. ☐ Asian (Non-Hispanic)
6. ☐ American Indian or Alaska Native (Non-Hispanic)
7. ☐ Two or more races

### Individual with disabilities \*

1. ☐ Yes ☐ No

If yes, please specify: \_\_\_\_\_

2. Please list any special accommodations required:

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\* A person having a physical or mental impairment that substantially limits one or more major life activities, has a record of such impairment, or is regarded as having such impairment.

The information solicited on this form will not be available to those responsible for reviewing applications, but will be used by OAI/NASA primarily to determine the extent to which various populations are represented in the applicant pool. This information will remain strictly confidential.



Applicant, fill in your name on the endorsement form, separate it from the application form, and give it along with the enclosed envelope (or a plain white envelope) to the teacher/faculty member you are asking to provide a recommendation based on your academic ability and interpersonal skills. Because the endorsement letter is a requirement of the application package, you are encouraged to set a predetermined date with the faculty member of when you can pick up the endorsement.

## LERCIP FACULTY/TEACHER ENDORSEMENT

**\*\*Must be a current instructor in applicant's area of expertise.\*\***

Student's name: \_\_\_\_\_

Student's school: \_\_\_\_\_

The above-named student is applying for a summer internship at NASA GRC. If selected, the student will be given the opportunity to work with GRC staff in a professional environment. Your endorsement of the student is requested in the space provided below or attach a separate letter. Be sure to address the following: student's potential to contribute and benefit from the experience, academic interests, maturity and commitment to completion of assignments.

☐ YES, I recommend the student for the program

☐ NO, I do not recommend the student for the program

Printed name: \_\_\_\_\_ Date: \_\_\_\_\_

Title/department: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

School address: \_\_\_\_\_  
City State Zip code

Email address: \_\_\_\_\_

May we contact you for additional information? ☐ YES ☐ NO

**IMPORTANT:** To be eligible for the program a student must have a teacher submit an endorsement with his/her application. It must be received no later than **January 15, 2005**. The student should return this endorsement in a sealed envelope with their application materials. If the endorsement is sent separately mail it to the following address:

**NASA GRC Educational Programs Office, Attn: LERCIP NASA Scholars, 21000 Brookpark Road, Mail Stop 7-4, Cleveland, OH 44135**



## **APPLICATION REMINDERS**

Before submitting your application package you should review it thoroughly. Special attention should be given to eligibility requirements, program dates, and deadlines. Be sure that you have supplied all information and materials requested. You are encouraged to make a copy of your completed application package for your records, as we are unable to return any application materials submitted.

### **COMPLETED APPLICATION CHECKLIST:**

- ☐ 1. 2005 LERCIP Scholars' Application
- ☐ 2. Placement Information
- ☐ 3. Student's Narrative Statement
- ☐ 4. Academic Information
- ☐ 5. Student Certification (*Name printed, signed and dated*)
- ☐ 6. Student Information
- ☐ 7. Teacher/Faculty Endorsement Form (*return in sealed white envelope, be sure student's name is printed across the front of the envelope, photocopies of this form are not required. Must be received by January 31, 2005, for student to be eligible for program.*)
- ☐ 8. School Transcripts (*Attach your current transcript of courses completed. Transcript must include final grades, cumulative GPA, and credit hours taken to date thru 2004 Fall semester/quarters. Photocopying your original transcript for application copies is acceptable. Unofficial school photocopies are also acceptable. Unacceptable: computer generated or handwritten report cards.*)
- ☐ 9. Original, signed application
- ☐ 10. Three, complete copies of application, NOT including original (*Applications that do not have the required copies are considered incomplete and will not be processed.*)

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Mail your **completed** application package to:

**NASA GRC Educational Programs Office  
Attn: LERCIP NASA Scholars  
21000 Brookpark Road, Mail Stop 7-4  
Cleveland, OH 44135**

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### **Questions or additional information, contact:**

GRC EPO Telephone: 216-433-6656 or email: [intern@grc.nasa.gov](mailto:intern@grc.nasa.gov)

Visit the following websites to find out more information:  
OAI <http://www.oai.org> or NASA GRC: <http://www.grc.nasa.gov>

**APPLICATION OR APPLICATION MATERIALS RECEIVED AFTER  
THE DEADLINE JANUARY 15, 2005, WILL NOT BE PROCESSED  
AND ARE CONSIDERED INELIGIBLE—NO EXCEPTIONS.**